

<u>NOTES</u>

FOR WELDING DETAILS SEE "CONNECTION STIFFENER DETAILS" ON STANDARD 24.2 MINIMUM PLATE SIZE SHOWN. DESIGN ACTUAL SIZE REQUIRED.

STIFFENERS AND BEARING PLATES ARE ALL PERPENDICULAR TO FLANGES. ANGLES ARE PARALLEL TO FLANGES.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.

DESIGNER NOTES

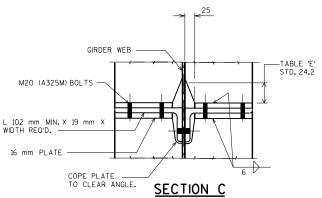
SIZE AND LENGTH OF ANGLES, NUMBER OF BOLTS THRU ANGLES, THICKNESS OF WEB PLATE, AND SIZE OF BEARING STIFFENERS AND JACKING STIFFENERS SHALL BE DETERMINED FROM AN ANALYSIS USING THE VERTICAL AND HORIZONTAL FORCES ACTING AT THE HINGE

 $\ensuremath{\Lambda}$ The 125 mm opening between girder web and flange plates is for fabrication actual opening is based on expansion length and temperature.

SLOTTED HOLES OF 150 mm IN THE FLANGES AND CONNECTING BARS WILL ACCOMMODATE A TOTAL TEMPERATURE MOVEMENT OF 200 mm (± 100 mm FROM 7° C). THE DESIGNER MAY NEED TO INCREASE OR DECREASE THE LENGTH OF THE SLOT TO MEET SPECIFIC JOB REQUIREMENTS.

CROSS FRAME UNDER BRG. AND END STIFFENER IS ONLY REO'D. IF TOTAL WEB HEIGHT EXCEEDS 2500 mm.

SEE BRIDGE MANUAL, SECTION 24.1 FOR CRITERIA FOR LOCATING HINGE JOINTS.



EXPANSION HINGE JOINT DETAILS

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

STRUCTURES DEVELOPMENT SECTION

APPROVED: 1/99